Design of virtual reality based physical and cognitive stimulation exercises for elderly people

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ABSTRACT

Elderly people are the most growing part of the population in developed countries (Europe, North America and Japan). This population is getting more and more alone and isolating this part of the population is the big issue of this century. This isolation can lead to a lack in physical and cognitive activity. Because virtual reality has given good results in health domain, we decided to design an application that combines physical activities and cognitive stimulation. The "Balade à l'EHPAD" application was then tested on different kind of population. Then, the expectations and needs of elderly people were collected and analyzed. The results clearly indicate that preconceived ideas exist in every people and also in professional caregivers who generally have a better knowledge of this population. Elderly people would like to have raw colors and virtually practice more violent sports (*e. g.*, skiing, rugby). The overall study clearly indicates that more than for younger adults, the involvement of elderly people into the application design process is a prerequisite for the appropriation by this population.

Full papers will be published in the Conference Proceeding s and will be available to delegates at the conference on Sept. 10.

Full papers will be released on-line in the ICDVRAT archive on March 15.